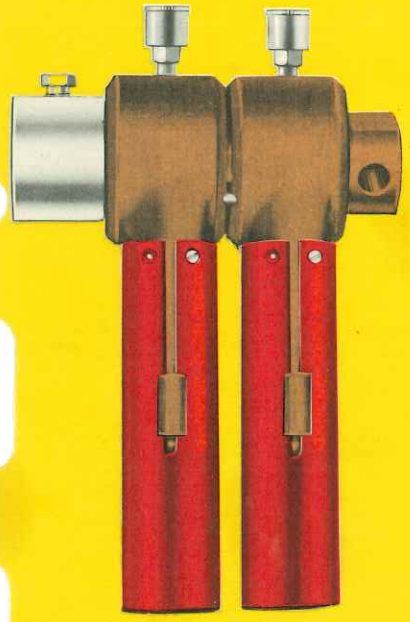
Box HT-1



Rec'd 2/23/67

# CONNECT WITH TWECO

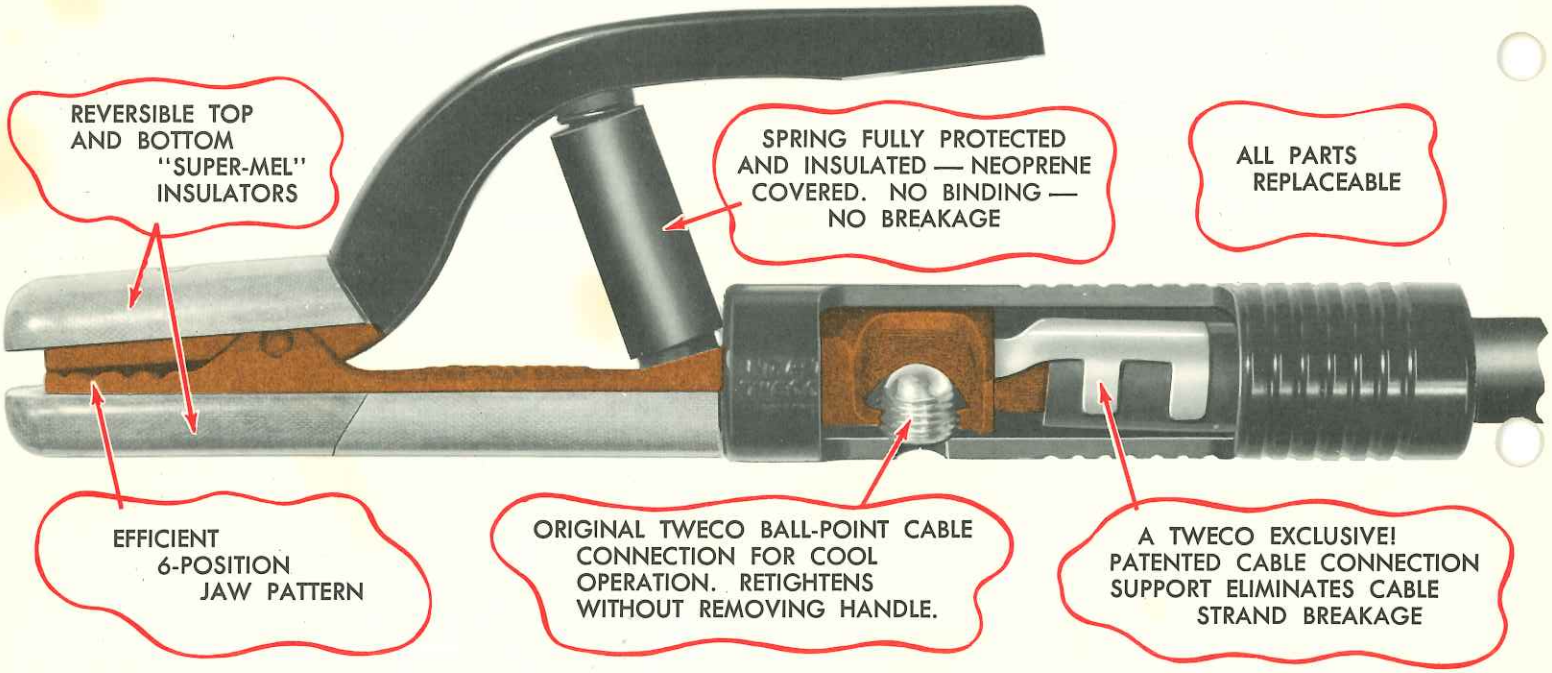
- ...ARC WELDING ELECTRODE HOLDERS
- MANUAL & AUTOMATIC GROUNDING DEVICES
- CABLE CONNECTORS
- LUGS, SPLICERS, AND CABLE ACCESSORIES



"IF IT GOES ON THE END OF A WELDING CABLE, **TWECO MAKES IT**"

# Only TWECOTONG Electrode Holders have long lasting "Super-Mel"* insulation and a patented cable connection support which greatly extends holder life

The major cause of electrode holder failure is burnout and breakage of its insulators. The intense arc heat, 9,000° to 10,000° F, together with normal hard use and abuse, results in short life for most insulation. To combat these conditions, TWECO provides exclusive "Super-Mel" insulation on all TWECOTONG Holders. It consists of glass fibres bonded together under heat and great pressure with Melemine resin, which is non-carbon charring. These insulators will withstand repeated impact and the searing heat of the arc.




TWECO Cable Connection Supports stop cable strand breakage behind the electrode holder connection. The twisting of the holder, as a man welds, causes the fine wire strands to work harden and break at this point. This has been one of the most common causes of holder overheating and failure. By using a Tweco Cable Connection support to bridge this weak point, where the strands are bared and unsupported, breakage is eliminated.

You can greatly reduce one of your biggest costs, lost man hours due to holder burnout and failure, by equipping your shop with long lasting, cool running, TWECOTONG Electrode Holders. They are made in a full range of sizes for all manual arc welding applications.

**"CONNECT WITH TWECO" — SAVE TIME and CABLE — STEP UP EFFICIENCY**

HOLDER WHIP LEAD — MALE HALF — FEMALE HALF — COMPLETE CONNECTOR — MALE HALF — TERMINAL CONNECTOR

HERE'S HOW — You can use TWECO Cable Connectors and TWECO Terminal Connectors for greater efficiency in your welding cable hook-up.

GROUND LEAD — MALE HALF — FEMALE HALF — SPLICER — MALE HALF — TERMINAL CONNECTOR

*U.S. REGISTERED TRADEMARK

**"CONNECT WITH TWECO"—MORE ARC TIME—LESS DOWN TIME**

# TWECOTONG* ELECTRODE HOLDERS

- **98% Copper Alloy — highly conductive, hard and tough.**
- **Powerful, all-position rod grip.**
- **Tough Super-Mel Insulation.**
- **Tip Insulators are interchangeable.**
- **Simple Ball Point Cable Connection tightens without removing handle.**
- **Double Ball-Point on Heavy Duty Models.**
- **All parts are replaceable.**

**No. A-532 TWECOTONG**
200 Amps — rods thru 5/32"
Weight 14 ozs. — Length 8½"
Cable Cap. thru 2/0

**No. A-316 TWECOTONG**
250 Amps — rods thru 3/16"
Weight 16 ozs. — Length 9¼"
Cable Cap. thru 2/0

**No. A-732 TWECOTONG**
300 Amps — rods thru 7/32"
Weight 18 ozs. — Length 10"
Cable Cap. thru 2/0

**No. AL-300 TWECOTONG**
300 Amps — rods thru ¼"
Weight 14 ozs. — Length 10"
Cable Cap. thru 2/0

**FORGED ALUMINUM**
(Only Aluminum Model in Line)

**No. A-14 TWECOTONG**
350 Amps — rods thru ¼"
Weight 24 ozs. — Length 11"
Cable Cap. thru 4/0

**No. A-14-HD TWECOTONG**
400 Amps — rods thru ¼"
Weight 30 ozs — Length 12"
Cable Cap. thru 4/0

**No. A-38-HD TWECOTONG**
500 Amps — rods thru ⅜"
Weight 34 ozs. — Length 13¼"
Cable Cap. thru 4/0

## SPECIFICATIONS AND PRICES

| | TWECOTONG Model | Amp. Cap. | Alloy | Electrode Capacity | Type — Capacity Cable Connection | Weight | Length | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A-532 | 200 | 98% Copper | thru 5/32" | Ball-Point thru 2/0 | 14 ozs. | 8½" | $ 7.00 | $6.30 | $6.00 | $5.70 | $5.40 | $5.15 |
| | A-316 | 250 | 98% Copper | thru 3/16" | Ball-Point thru 2/0 | 16 ozs. | 9½" | 7.50 | 6.75 | 6.40 | 6.10 | 5.80 | 5.50 |
| Group | A-732 | 300 | 98% Copper | thru 7/32" | Ball-Point thru 2/0 | 18 ozs. | 10" | 8.30 | 7.45 | 7.10 | 6.75 | 6.40 | 6.10 |
| "A" | AL-300 | 300 | Forged Aluminum | thru ¼" | Ball-Point thru 2/0 | 14 ozs. | 10" | 9.00 | 8.10 | 7.70 | 7.30 | 6.95 | 6.60 |
| | A-14 | 350 | 98% Copper | thru ¼" | Ball-Point thru 4/0 | 24 ozs. | 11" | 8.80 | 7.90 | 7.50 | 7.15 | 6.80 | 6.45 |
| | A-14-HD | 400 | 98% Copper | thru ¼" | Double Ball-Point thru 4/0 | 30 ozs. | 12" | 10.00 | 9.00 | 8.55 | 8.10 | 7.70 | 7.30 |
| | A-38-HD | 500 | 98% Copper | thru ⅜" | Double Ball-Point thru 4/0 | 34 ozs. | 13¼" | 10.80 | 9.70 | 9.20 | 8.75 | 8.30 | 7.90 |

*TWECOTONG is a registered trademark. (See Page 4 for complete parts and price list.)

**TWECO IS DESIGNED WITH THE WELDOR IN MIND**

# TWECOTONG PARTS LIST AND PRICES

1 — TIP INSULATION

3 — BODY INSULATION

IDENTICAL

4 — LOWER BODY TONG

6 — SPRING WITH INSULATION

50 — UPPER LEVER TONG WITHOUT INSULATION

22 — UPPER REPLACEABLE JAW

23 — LOWER REPLACEABLE JAW

51 — UPPER INSULATOR

26 — CABLE CONNECTION SUPPORT

52 — FIBRE STRIP

5 — UPPER LEVER TONG

13 — INSULATION SCREWS

11 — HINGE PIN



12 — HANDLE SCREW

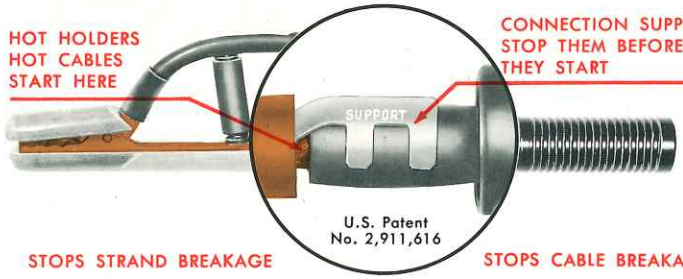
24 — CABLE CONNECTION SCREW

7 — FIBRE HANDLE

## ALL TWECOTONG PARTS ARE REPLACEABLE

NO. 10-P

TWECO Cable Connection Supports stop cable strand breakage behind the electrode holder connection. The twisting of the holder, as a man welds, causes the fine wire strands to work harden and break at this point. This has been one of the most common causes of holder overheating and failure. By bridging this weak point, where the strands are bared and unsupported, breakage is eliminated.



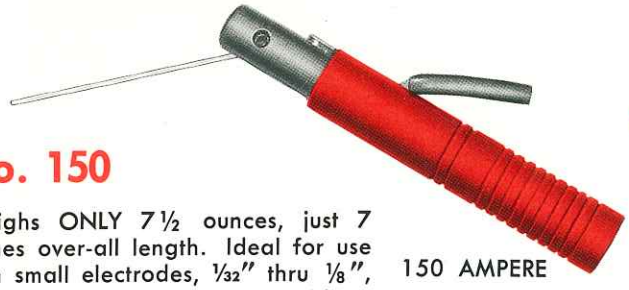

## PARTS LISTS AND PRICES — ALL TWECOTONG HOLDERS

TO ORDER PARTS FOR TWECOTONG ELECTRODE HOLDERS, please note in the parts list below, numbered parts from 1 through 26. Use this part number in combination with the number of the particular holder for which the part is desired. Thus, Part No. 4-A532 would be the Lower Body Tong for a No. A-532 TWECOTONG Holder. INTERCHANGEABILITY OF PARTS: Please note that small letters appear by the parts price. This indicates the part is identical and interchangeable with other parts carrying the same letter symbol.

| | | TWECOTONG MODEL NUMBER | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Part No. | Part Name | A-532 | A-316 | A-732 | AL-300 | A-14 | A-14-HD | A-38-HD |
| 1. | Tip insulation with screw, for either upper or lower tong (interchangeable part) | .60a | .60a | .70b | .65 | .70b | .70b | .85c |
| 3. | Body insulation, with screw | .65d | .65d | .65d | .75 | .75e | .75e | .90 |
| 4. | Lower Body Tong, with cable connection and handle screws | 2.75 | 3.05 | 3.40 | 3.35 | 3.60 | 4.10 | 4.90 |
| 5. | Upper Tong, with fibre tube insulation | 1.75 | 1.90 | 2.20 | ... | ... | ... | ... |
| 50. | Upper Tong without insulation | ... | ... | ... | 2.00 | 2.10 | 2.40 | 2.55 |
| 51. | Upper Tong Replacement Insulator | ... | ... | ... | .70h | .70h | .70h | .75 |
| 52. | Fibre Strip Insulation under upper tong | ... | ... | ... | .05i | .05i | .05i | .05 |
| 6. | Spring with Insulation and Neoprene Cover | .45 | .50j | .50j | .50r | .50r | .50r | .50r |
| 7. | Fibre Handle Only | 1.40 | 1.40 | 1.40 | 1.45 | 1.50 | 1.55 | 1.65 |
| 11. | Hinge Pin | .04 | .04 | .04 | .05 | .06 | .10 | .12 |
| 12. | Handle Screw | .10k | .10k | .10k | .10k | .10k | .10k | .10k |
| 13. | Insulation or Replaceable Jaw Screws, dozen (identical parts) | .10 l | .10 l | .10 l | .10 l | .10 l | .10 l | .10 l |
| 22. | Replaceable Jaw, Upper with Screws | ... | ... | ... | .65 | ... | ... | ... |
| 23. | Replaceable Jaw, Lower with Screws | ... | ... | ... | .65 | ... | ... | ... |
| 24. | Cable Connection Screw (Ball-Point) | .15m | .15m | .15m | .20 | .20n | .20n | .20n |
| 25. | 7/32" Hex Wrench for Cable Connection and Handle Screws | .15p | .15p | .15p | .15p | .15p | .15p | .15p |
| 26. | 10-P Cable Connection Support | .25s | .25s | .25s | .25s | .25s | .25s | .25s |

# TWECO "HOL-GRIP"* HOLDERS

## A POSITIVE TWO POSITION HOLDER . . . ACCEPTED BY PARTICULAR WELDORS FOR 25 YEARS



150 AMPERE

- COMPLETELY INSULATED — COOL RUNNING
- SIMPLE ONE-HAND ACTION
- POSITIVE POSITION ROD GRIP 90° SIDE HOLE — 45° BOTTOM HOLE
- IDEAL FOR MAINTENANCE WELDING, TOOL, DIE AND JIG WORK
- LOW PROFILE FOR TIGHT QUARTERS

### No. 150

Weighs ONLY 7½ ounces, just 7 inches over-all length. Ideal for use with small electrodes, 1/32" thru 1/8", on pipe, tube & sheet metal welding.

200 AMPERE

### No. 200

Compact, streamlined, low-profile holder for a wide range of close quarter applications. Weighs just 13½ ounces. Grips electrodes positively, from 1/16" thru 3/16".

300 AMPERE

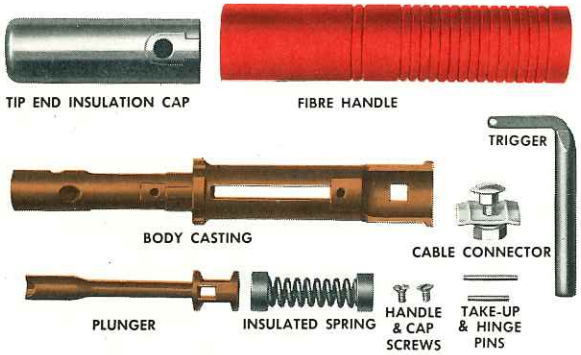
### No. 300

General purpose, *FULLY* insulated, 300 ampere holder for all applications in the normal welding range. Electrode stubs won't clog or stick. Ideal for all position welding. A fine maintenance welding tool.

### SPECIFICATIONS AND PRICES

| | Model | Amp. Cap. | Electrode Cap. | Wt. Oz. | Length | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "A" | 150 | 150 | 1/8 - 1/32" | 7½ | 7" | $6.80 | $6.10 | $5.80 | $5.50 | $5.25 | $5.00 |
| | 200 | 200 | 3/16 - 1/16" | 13½ | 9½" | 7.80 | 7.00 | 6.65 | 6.30 | 6.00 | 5.70 |
| | 300 | 300 | 1/4 - 1/16" | 22 | 10½" | 8.80 | 7.90 | 7.50 | 7.15 | 6.80 | 6.45 |

### PARTS AND PRICES




| | No. 150 | No. 200 | No. 300 |
|---|---|---|---|
| 1. Tip End Insulation Cap with Screw | $1.00 | $1.25 | $1.30 |
| 2. Holder Main Body Casting | 2.70 | 3.10 | 3.55 |
| 3. Plunger | .90 | 1.10 | 1.30 |
| 4. Spring with insulators | .50 | .60 | .65 |
| 5. Trigger, fibre tube covered, with pin | .55 | .70 | .75 |
| 6. Fibre Handle with screw | 1.10 | 1.25 | 1.30 |
| 7. Cable Clamp, bolt and nut | .20 | .25 | .25 |
| 8. Extra screws for handle or insulation, same, dozen | .10 | .10 | .15 |
| 9. Stainless pin for lever | .05 | .05 | .05 |
| 10. Stainless pin for Spring Take up | .05 | .05 | .05 |

*HOL-GRIP is a registered trade-mark.

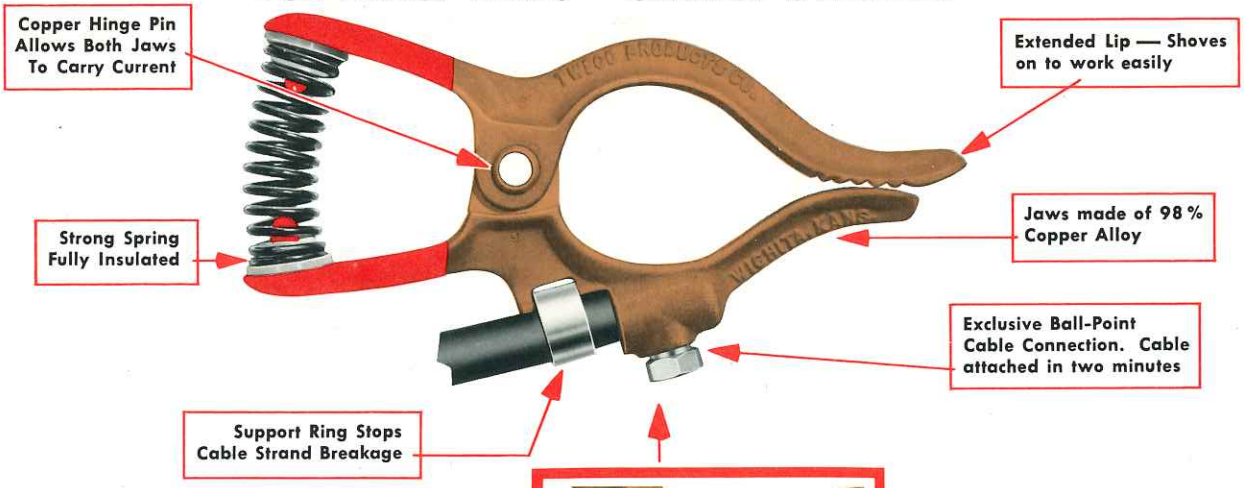
TWECO IS DESIGNED WITH THE WELDOR IN MIND

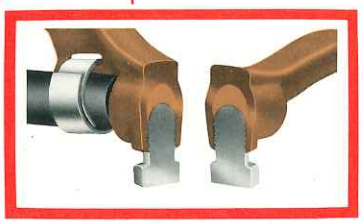
# TWECO* GROUND CLAMPS

## A QUICK PORTABLE GROUND

## EASY ON — EASY OFF

## FOR BETTER WELDS — GREATER EFFICIENCY



Cut-away of actual connection shows tremendous pressure of the ball-point screw on cable. Strands are pressed into solid mass.

### SPECIFICATIONS AND PRICES

| | Clamp Model | Ampere Capacity | Jaw Opening | Type — Capacity Cable Connection | Weight | Length | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "B" | GC-200 Cub | 200 | 1¼″ — Depth 3″ | Ball-Point thru 1/0 | 14 ozs. | 6″ | $4.00 | $3.60 | $3.40 | $3.25 | $3.10 | $2.95 |
| | GC-300 Junior | 300 | 1½″ — Depth 4″ | Ball-Point thru 3/0 | 24 ozs. | 8½″ | 5.80 | 5.20 | 4.95 | 4.70 | 4.45 | 4.25 |
| | GC-500 Senior | 500 | 2″ — Depth 5¼″ | Ball-Point thru 4/0 | 37 ozs. | 10″ | 6.80 | 6.10 | 5.80 | 5.50 | 5.25 | 5.00 |

*TWECO is a registered trade-mark.

### PARTS AND PRICES

**INSULATED SPRING (Sold as a unit only.)**

| | |
|---|---|
| CUB | $0.25 |
| *JUNIOR | .30 |
| *SENIOR | .30 |

*Interchangeable Parts

**CABLE CONNECTION SCREW**

| | |
|---|---|
| CUB | $0.15 |
| JUNIOR | .15 |
| SENIOR | .20 |

**CABLE SUPPORT RING**

| | |
|---|---|
| CUB | $0.14 |
| JUNIOR | .14 |
| SENIOR | .16 |

**"CONNECT WITH TWECO"—MORE ARC TIME—LESS DOWN TIME**

# TWECO ROTO-GROUND

## HEAVY DUTY ROTARY GROUNDING DEVICE

NO. RG-230
600 AMPERES

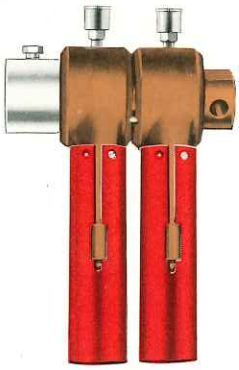
SINGLE HEAD
2-3/0 CABLES

NO. RG-240
800 AMPERES

SINGLE HEAD
2-4/0 CABLES

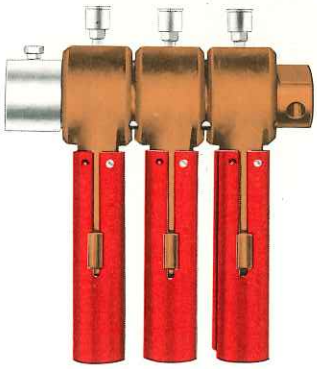
NO. RG-440
1500 AMPERES

DOUBLE HEAD
4-4/0 CABLES



NO. RG-640
2000 AMPERES

TRIPLE HEAD
6-4/0 CABLES



TWECO ROTO-GROUNDS are highly efficient devices for grounding tanks, or other weldments, while being rotated on turning rolls or positioners. Their design is extremely rugged for heavy duty service. Simplicity of construction and operation, with copper head and shaft, makes them foolproof. No brushes to maintain. No springs to weaken and fail. No mercury containment problems. Roto-Grounds have only one simple tension adjusting bolt, providing any degree of tightness between the rotating head and shaft to achieve maximum efficiency. When necessary, the rotating head can be counterbalanced by suspending a weight from the side lug to hold cables in perpendicular position.

TWECO ROTO-GROUNDS can be used on manual, semi-automatic or fully automatic welding applications. Made in five sizes — 400, 600, 800, 1500, and 2000 amperes. No. RG-230, 600 ampere Roto-Ground accommodates two 3/0 welding cables. Each head on Model Nos. RG-240, RG-440, and RG-640 accommodates two 4/0 welding cables. Shafts of varying length take from one to three heads, depending on amperage required. Three TWECO Ball-Point screws firmly and efficiently connect each cable into the cable sockets of the head. Each head and shaft is provided with grease cup lubrication. A round steel nut, to which a "U" bracket can be welded for attachment to the work, and a 12" heat treated tightening bar is provided with each Roto-Ground.

### SPECIFICATIONS AND PRICES

| | Model Number | Amp. Capacity | Cable Capacity | No. Heads | Shaft Stud | Length | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "H" | RG-140 | 400 | 1-4/0 | 1 | ¾" NC | 8" | 2 lbs. 10 oz. | $38.00 | $34.20 | $32.50 | $30.90 |
| | RG-230 | 600 | 2-3/0 | 1 | 1⅛" NC | 10¼" | 6 lbs. 12 oz. | 48.00 | 43.20 | 41.05 | 39.00 |
| | RG-240 | 800 | 2-4/0 | 1 | 1⅜" NC | 10⅝" | 8 lbs. 12 oz. | 55.00 | 49.50 | 47.05 | 44.70 |
| | RG-440 | 1500 | 4-4/0 | 2 | 1⅜" NC | 10⅝" | 15 lbs. 4 oz. | 98.00 | 88.20 | 83.80 | 79.60 |
| | RG-640 | 2000 | 6-4/0 | 3 | 1⅜" NC | 10⅝" | 21 lbs. 12 oz. | 140.00 | 126.00 | 119.70 | 113.70 |
| | **ROTO-GROUND AND MAGNETIC ATTACHMENT** | | | | | | | | | | |
| | RG-140-M | Complete Unit | | 400 Amp. Cap. | 4½" dia. | | 6 lbs. | 78.00 | 70.20 | 66.70 | 63.40 |
| | RG-140-MA | Magnet Head Only | | 400 Amp. Cap. | 4½" dia. | | 3 lbs. 8 oz. | 40.00 | 36.00 | 34.20 | 32.50 |

The TWECO Magnetic Attachment rotary grounding device is for quickly attaching or detaching the No. RG-140 Roto-Ground magnetically to the end of tanks or other revolving weldments. This is a precision production tool that must be used with maximum care for satisfactory results.

### PARTS AND PRICES

ROTO-GROUND HEADS

NO. 2-0 HEAD $25.00
NO. 3-0 HEAD $27.50
(1 req'd for No. RG-230)

NO. 4-0 HEAD $30.75
(1 req'd for No. RG-240)
(2 req'd for No. RG-440)
(3 req'd for No. RG-640)

NO. 140 SINGLE HEAD SHAFT $15.00
NO. 230 SINGLE HEAD SHAFT $22.25
NO. 240 SINGLE HEAD SHAFT $25.00

NO. 440 DOUBLE HEAD SHAFT $36.00

NO. 640 TRIPLE HEAD SHAFT $50.00

WORK ATTACHMENT NUT

NO. 140 $ .35
NO. 230 $ .35
NO. 240,
440, 640 2.50

10. TIGHTENING BAR $1.25



24. CABLE CONNECTION SCREW (Ball-Point) $ .20

7. FIBRE COVER $1.75

6. TENSION ADJUSTING SCREW WITH WASHERS $ .75
8. FIBRE COVER SCREW DOZEN $ .10
9. HEAD ALIGNMENT PIN $ .10
11. LUBRICATING CUP $ .50
12. SPECIAL SHAFT LUBRICANT 1 OZ. BOTTLE $ .50
25. 7/32" HEX WRENCH for Cable Connection Screws $ .15
26. 10-P CABLE CONNECTION SUPPORT $ .25

# TWECO ROTO-WORK GROUNDING CLAMPS

No. WCRG-600
and WCRG-1200

TWECO ROTO-WORK GROUNDING CLAMPS are designed primarily to work in connection with the TWECO ROTO-GROUND Device: However, they may also be used for other high amperage grounding applications. The ROTO-GROUND shaft screws into the tapped back of the ROTO-WORK Clamp. The clamp is quickly attached or moved from one rotating weldment or fixture to the other without removing the ROTO-GROUND from it. Saves welding down time.

ROTO-WORK Clamps are made from 98% copper alloy. They come in 600, 1200, and 2000 ampere capacity. No. WCRG-600 ampere and WCRG-1200 ampere have single tightening screws. No. WCRG-2000 has two tightening screws. No. WCRG-600 works only with No. RG-230 Roto-Ground due to its smaller shaft size. Large tightening screws and ample contact surface area provides cool, efficient operation.

No. WCRG-2000

### SPECIFICATIONS AND PRICES

| | ROTO-WORK Clamp No. | Amp. Cap. | Clamp Contact Area | Throat Height | Throat Depth | Height | Width | Tapped For | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "H" | WCRG-600* | 600 | 6¼ Sq. In. | 2½" | 2½" | 5¾" | 2½" | 1⅛" N.C. | 8 lbs. 2 oz. | $30.00 | $27.00 | $25.65 | $24.35 |
| | WCRG-1200** | 1200 | 9 Sq. In. | 3" | 3" | 6¾" | 3" | 1⅜" N.C. | 9 lbs. 12 oz. | 35.00 | 31.50 | 29.95 | 28.45 |
| | WCRG-2000*** | 2000 | 12 Sq. In. | 3" | 3" | 6¾" | 4" | 1⅜" N.C. | 11 lbs. 12 oz. | 50.00 | 45.00 | 42.75 | 40.60 |

*Fits No. RG-230 Roto-Ground
**Fits No. RG-240 and RG-440 Roto-Grounds
***Fits No. RG-440 and RG-640 Roto-Grounds

TWECO IS DESIGNED WITH THE WELDOR IN MIND

# TWECO CABLE CONNECTORS

IN THE CIRCUIT

## • ADD ON CABLE — TAKE OFF CABLE • SPLICE CABLE — REPAIR CABLE • USE SHORTER CABLES — SAVE WEAR • SAVE WELDING OPERATOR'S TIME • REMOVE CABLE — PREVENT THEFT

TWECO WELDING CABLE CONNECTORS have gained wide acceptance over the past 25 years because they are simple, easy to use, efficient and economical. The connector will go together or come apart at only one place — where the screw holes line up or marking arrows come together. A quarter turn, in either direction, locks the plug into the receptacle and the connector remains locked through a complete 360° turn. Through the use of a split male plug, accurate tension adjustment can be easily made with a screw-driver, should this ever be necessary.

ALL TWECO CABLE CONNECTORS are precision machined from extruded brass rod of special contour. Three methods of securing the cable in the connector body are provided: Ball-Point type — Mec-Con with tapered screw and nut — Sol-Con for solder connection. All three types, and sizes, are supplied with heat and oil resistant Neoprene Covers that are tapered to avoid snagging when cables are being dragged. A metal tube is molded into the Neoprene cover at the screw holes, providing strength and rigidity. Fibre Covers are also available, but must be specified when ordering.

INTERCHANGEABILITY

All Ball-Point, Mec-Con, and Sol Con Connectors interchange within size. The male plug and female receptacle on all types are the same — the only difference is the means of attaching the cable. All No. 1 size connectors interchange. All No. 2 & 4 size connectors interchange.

NEOPRENE COVER
(Furnished Standard)

**THE TAPERED NEOPRENE COVER IS NOW STANDARD ON ALL TYPES AND SIZES OF TWECO CONNECTORS. FIBRE COVERS ARE AVAILABLE AND MUST BE SPECIFIED WHEN ORDERING. FOR EXAMPLE: NO. 2 SOL-CON CONNECTOR, WITH FIBRE COVER.**

FIBRE COVER
(Furnished When Specified)

## BALL-POINT . . . MECHANICAL CONNECTOR Attach Cables with 7/32" Hex Wrench

Ball-Point Connector — Cover Removed

| | Connector Model | Type Cover | Type Cable Connection | Cable Capacity | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "C" | No. 1-MBP | Neoprene | Single B.P. | 4, 2, 1, 1/0 | 6 | 9 ozs. | $4.30 | $3.85 | $3.65 | $3.45 | $3.30 | $3.15 |
| | No. 2-MBP | Neoprene | Single B.P. | 1/0, 2/0, 3/0 | 6 | 15 ozs. | 5.30 | 4.75 | 4.50 | 4.30 | 4.10 | 3.90 |
| | No. 4-MBP | Neoprene | Double B.P. | 3/0 or 4/0 | 6 | 18 ozs. | 6.50 | 5.85 | 5.55 | 5.25 | 5.00 | 4.75 |

TWECO BALL-POINT Cable Connectors can be furnished with heavy Fibre Covers at no additional cost. Please specify "WITH FIBRE COVERS" when desired. Male or Female Half Connector is one-half (½) price of full connector. In computing for quantity bracket price, two (2) half connectors equal one (1) full connector.

## MEC-CON* . . . MECHANICAL CONNECTOR Attach Cables Mechanically

Mec-Con Connector — Cover Removed

| | Connector Model | Type Cover | Type Cable Connection | Cable Capacity | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "C" | No. 1-M Mec-Con | Neoprene | Mechanical | 4, 2, or 1 | 6 | 10 ozs. | $4.50 | $4.05 | $3.85 | $3.65 | $3.45 | $3.30 |
| | No. 2-M Mec-Con | Neoprene | Mechanical | 1/0 or 2/0 | 6 | 17 ozs. | 5.50 | 4.95 | 4.70 | 4.45 | 4.25 | 4.05 |
| | No. 4-M Mec-Con | Neoprene | Mechanical | 3/0 or 4/0 | 6 | 17 ozs. | 5.70 | 5.15 | 4.90 | 4.65 | 4.40 | 4.20 |

TWECO MEC-CON Cable Connectors can be furnished with heavy Fibre Covers at no additional cost. Please specify "WITH FIBRE COVERS" when desired. Male or Female Half Connector is one-half (½) price of full connector. In computing for quantity bracket price, two (2) half connectors equal one (1) full connector.

*U. S. REGISTERED TRADEMARK

# TWECO CABLE CONNECTORS

**IN THE CIRCUIT**

## SOL-CON* . . . SOLDER CONNECTOR Attach Cables with Solder

Sol-Con Connector — Cover Removed

| | Connector Model | Type Cover | Type Cable Connection | Cable Capacity | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "C" | No. 1 Sol-Con | Neoprene | Solder | 4, 2, or 1 | 6 | 8 ozs. | $3.00 | $2.70 | $2.55 | $2.40 | $2.30 | $2.20 |
| | No. 2 Sol-Con | Neoprene | Solder | 1/0 thru 4/0 | 6 | 13 ozs. | 3.80 | 3.40 | 3.25 | 3.10 | 2.95 | 2.80 |

TWECO SOL-CON Cable Connectors can be furnished with heavy Fibre Covers at no additional cost. Please specify "WITH FIBRE COVERS" when desired.
Male or Female Half Connector is one-half (½) price of full connector. In computing for quantity bracket price, two (2) half connectors equal one (1) full connector.

### REPLACEMENT PARTS — BALL-POINT — MEC-CON — SOL-CON

**NEOPRENE COVERS:**

No. 1 Neoprene Cover. Fits either Male or Female End of all No. 1 size Ball-Point, Mec-Con or Sol-Con TWECO Connectors . . .60

No. 24-MBP Neoprene Cover. Fits either Male or Female End of all No. 2 or 4 sizes of Ball-Point, Mec-Con or Sol-Con TWECO Connectors . . . . . .70

**FIBRE COVERS:**

When ordering, specify Type Connector, Size, Male or Female End.

Male or Female Fibre Replacement Cover for any No. 1 size Ball-Point, Mec-Con or Sol-Con TWECO Connector . . . . . .60

Male or Female Fibre Replacement Cover for any No. 2 or 4 size Ball-Point, Mec-Con or Sol-Con TWECO Connector . . . . . .70

Extra Screws, per dozen, for all sizes TWECO Connectors . . . . . .10
Ball-Point Cable Connection Screw for No. 1-MBP . . . . . .15
Ball-Point Cable Connection Screw for No. 2-MBP or 4-MBP . . . . .20

# WHIP CABLE CONNECTORS

**FOR WHIP CABLE LEADS**

## Attaches Small Whip Cables To Larger Lead Cables

The Whip Cable Connector is similar in design to the male half of the TWECO Cable Connector. The plug end will fit into the female half of any No. 2 Sol-Con, No. 2-M or 4-M Mec-Con and No. 2-MBP or 4-MBP Ball-Point. The cable end is reduced in size to accept the smaller cables ordinarily used for whips. Available only in Ball-Point type.

| | Whip Cable Connector Model | Type Cable Connection | For Cable Size | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Group "C" | No. 2-1-MBP | Ball-Point | 4, 2, 1, 1/0 | 12 | 5 ozs. | $3.00 | $2.70 | $2.55 | $2.40 | $2.30 | $2.20 |

# TWECO FEMALE TERMINALS

**AT THE MACHINE**

## BOLT TO WELDING MACHINE STUDS — USE WITH MALE HALF OF ANY TWECO CONNECTOR

No. 1-AF and 2-AF 45° Angle Terminal

### WHAT THEY DO

- QUICKLY CONNECT OR DETACH WELDING CABLES RIGHT AT THE MACHINE
- SIMPLE CABLE DISCONNECT FOR "JUMP-IN" OF ADDITIONAL CABLE
- PROVIDES EASY CABLE SWITCH FOR REVERSING POLARITY
- ELIMINATES MACHINE STUD BURN-OUT AND STRIPPED STUD THREADS
- FAST CABLE REMOVAL FOR MAINTENANCE, SHIPPING, SAFETY FROM THEFT

No. 1-OF and 2-OF 180° Offset Terminal

| | FEMALE TERMINAL CONNECTOR ONLY | Size of Stud Hole | Weight | Std. Pkg. | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|
| Group "C" | No. 1-AF Female Only 45° Angle } Takes No. 1, 1-M or 1-MBP | 17/32" | 5½ ozs. | 24 | $2.30 | $2.05 | $1.95 | $1.85 | $1.75 | $1.65 |
| | No. 1-OF Female Only 180° Offset } Male Ends | 17/32" | 5½ ozs. | 24 | 2.30 | 2.05 | 1.95 | 1.85 | 1.75 | 1.65 |
| | No. 2-AF Female Only 45° Angle } Takes No. 2, 2-M, 4-M, 2-MBP | 17/32" | 7½ ozs. | 24 | 2.90 | 2.60 | 2.45 | 2.35 | 2.25 | 2.15 |
| | No. 2-OF Female Only 180° Offset } 4-MBP or 2-1-MBP Male Ends | 17/32" | 7½ ozs. | 24 | 2.90 | 2.60 | 2.45 | 2.35 | 2.25 | 2.15 |

For price of Male Plugs only refer to half connector price shown under "Sol-Con," "Mec-Con" or "Ball-Point" (see Pages 8 and 9) cable connectors. Number sizes of Connectors and Terminals interchange in the welding cable circuit.

*U.S. REGISTERED TRADEMARK

# TWECOLUGS — BALL POINT TYPE

No. 10-45 and 40-45
45° Angle Twecolug

No. 10-180 and 40-180
180° Offset Twecolug

No. 10-45C and 40-45C 45°
Angle Twecolug with Fibre Cover

No. 10-180C and 40-180C 180°
Offset Twecolug with Fibre Cover

## SPECIFICATIONS AND PRICES

| | TWECOLUG NO. | Angle | Type Cable Connection | Cable Capacity | Size of Stud Hole | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROUP "D" | **Plain — Less Fibre Cover** | | | | | | | | | | | | |
| | 10-45 | 45° | Ball-Point | thru 1/0 | 17/32" | 12 | 4½ oz. | $2.20 | $2.00 | $1.90 | $1.80 | $1.70 | $1.60 |
| | 10-180 | 180° | Ball-Point | thru 1/0 | 17/32" | 12 | 4½ oz. | 2.20 | 2.00 | 1.90 | 1.80 | 1.70 | 1.60 |
| | 40-45 | 45° | Ball-Point | thru 4/0 | 17/32" | 12 | 7 oz. | 2.50 | 2.25 | 2.15 | 2.05 | 1.95 | 1.85 |
| | 40-180 | 180° | Ball-Point | thru 4/0 | 17/32" | 12 | 6½ oz. | 2.50 | 2.25 | 2.15 | 2.05 | 1.95 | 1.85 |
| | **With Fibre Cover** | | | | | | | | | | | | |
| | 10-45C | 45° | Ball-Point | thru 1/0 | 17/32" | 12 | 6 oz. | 2.80 | 2.50 | 2.40 | 2.30 | 2.20 | 2.10 |
| | 10-180C | 180° | Ball-Point | thru 1/0 | 17/32" | 12 | 6 oz. | 2.80 | 2.50 | 2.40 | 2.30 | 2.20 | 2.10 |
| | 40-45C | 45° | Ball-Point | thru 4/0 | 17/32" | 6 | 9 oz. | 3.20 | 2.90 | 2.75 | 2.60 | 2.45 | 2.35 |
| | 40-180C | 180° | Ball-Point | thru 4/0 | 17/32" | 6 | 8½ oz. | 3.20 | 2.90 | 2.75 | 2.60 | 2.45 | 2.35 |

## PARTS AND PRICES

½" BALL-POINT SCREW FOR ALL NO. 10 SIZE, $0.15
FIBRE COVER FOR ANY NO. 10 SIZE, $0.70
FIBRE COVER SCREWS, DOZ. $0.10
⅝" BALL-POINT SCREW FOR ALL NO. 40 SIZE, $0.20
FIBRE COVER FOR ANY NO. 40 SIZE, $0.75

# HEAVY DUTY TWECOLUGS — BALL POINT TYPE

NO. 140-HD-180 (Without Cover) — 500 AMPERES CAPACITY

NO. 140 HD-180-C (With Fibre Cover)

NO. 240-HD-180 (Furnished only without Cover) — 1000 AMPERES CAPACITY

TWECO Heavy Duty, 98% Copper Alloy, Double Ball-Point Lugs were developed to handle the higher amperages that have become common with the introduction of high speed electrodes, plus semi-automatic and fully automatic processes. The No. 140-HD-180, single cable lug, takes either 3/0 or 4/0 welding cable which is installed under the high compression of two Ball-Point screws for maximum current transfer. This lug is supplied with or without a Fibre Cover. The No. 240-HD-180, twin-cable lug, makes it possible to parallel two 3/0 or 4/0 cables to carry up to 1000 amperes.

## SPECIFICATIONS AND PRICES

| | TWECOLUG NO. | Type Cable Connection | Cable Capacity | Size of Stud Hole | Weight | Length | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROUP "D" | 140-HD-180 | Mech. Ball-Point | 3/0 & 4/0 | 21/32" | 10 oz. | 4⅜" | $3.20 | $2.90 | $2.75 | $2.60 | $2.45 | $2.35 |
| | 140-HD-180C (with cover) | Mech. Ball-Point | 3/0 & 4/0 | 21/32" | 12 oz. | 5½" | 4.00 | 3.60 | 3.40 | 3.25 | 3.10 | 2.95 |
| | 240-HD-180 | Mech. Ball-Point | 3/0 & 4/0 | 21/32" | 20 oz. | 4⅝" | 7.00 | 6.30 | 6.00 | 5.70 | 5.40 | 5.15 |

## PARTS AND PRICES

⅝" BALL-POINT SCREW, $0.20
FIBRE COVER FOR NO. 140-HD-180-C, $0.85
FIBRE COVER SCREWS, DOZ. $0.10

# TWECO BALL POINT CABLE SPLICERS

Illustration shows covers removed — Furnished complete with cover or less cover

- REPAIR BROKEN CABLES
- USE OVER AND OVER
- SPLICE SHORT CABLES
- HEAVY WALL FIBRE SLEEVES
- SPLICE ON WHIP CABLE LEADS
- INSTALL WITH 7/32" HEX WRENCH

## SPECIFICATIONS AND PRICES

| | SPLICER NO. | Cable Cap. | Type Cable Connection | Length | Std. Pkg. | Weight | CONSUMER QUANTITY PRICES 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROUP "E" | BP 410 | 4, 2, 1, 1/0 | Ball-Point | 4¼" | 12 | 4 oz. | $2.70 | $2.45 | $2.35 | $2.25 | $2.15 | $2.05 |
| | BP 1030 | 1/0, 2/0, 3/0 | Ball-Point | 4½" | 12 | 7 oz. | 3.10 | 2.80 | 2.65 | 2.50 | 2.40 | 2.30 |
| | BP 2040 | 2/0, 3/0, 4/0 | Double Ball-Point | 6½" | 6 | 12 oz. | 5.00 | 4.50 | 4.30 | 4.10 | 3.90 | 3.70 |
| | Less Fibre Cover | | | | | | | | | | | |
| | BP-410-LC | 4, 2, 1, 1/0 | Ball-Point | 2¼" | 12 | 3 oz. | 2.30 | 2.05 | 1.95 | 1.85 | 1.75 | 1.65 |
| | BP-1030-LC | 1/0, 2/0, 3/0 | Ball-Point | 2½" | 12 | 5 oz. | 2.50 | 2.25 | 2.15 | 2.05 | 1.95 | 1.85 |
| | BP-2040-LC | 2/0, 3/0, 4/0 | Double Ball-Point | 4½" | 6 | 8 oz. | 4.40 | 3.95 | 3.75 | 3.55 | 3.35 | 3.20 |

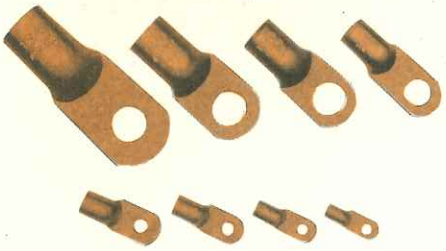
## PARTS AND PRICES

| SPLICER NO. | FIBRE COVERS | CABLE CONNECTION SCREW | EXTRA INSUL. SCREWS |
|---|---|---|---|
| BP-410 | $0.50 ea. | $0.15 ea. | $0.10 per doz. |
| BP-1030 | .70 ea. | .20 ea. | .10 per doz. |
| BP-2040 | .90 ea. | .20 ea. | .10 per doz. |

"CONNECT WITH TWECO"—MORE ARC TIME—LESS DOWN TIME

# TWECOLUGS—SOLDER TYPE

- Large Stud Holes
- Made from Pure Copper Tube
- Ample Wingnut Clearance
- Cable Size Numbered



| Twecolug No. | Welding Cable Size | U. L. Amp. Rating | Size of Stud Hole | I. D. Solder Socket | Std. Pkg. | Weight Per 100 | CONSUMER QUANTITY PRICES Less Than 100 | 100-499 | 500-Up |
|---|---|---|---|---|---|---|---|---|---|
| **WELDING CABLE TWECOLUGS** | | | | | | | | | |
| T-62 | 6 thru 2 | 150 | 17/32" | .461" | 50 | 5 lb. | $0.24 | $0.23 | $0.22 |
| T-120 | 1 thru 2/0 | 225 | 17/32" | .559" | 50 | 8 lb. | .40 | .38 | .36 |
| T-3040 | 3/0 and 4/0 | 250 | 17/32" | .660" | 25 | 12 lb. | .66 | .63 | .60 |
| T-40HD | 4/0 Hvy. Duty | 325 | 21/32" | .776" | 25 | 23 lb. | .96 | .91 | .86 |
| NOTE: T-120 and T-3040 also available with 21/32" Stud Hole. | | | | | | | | | |
| **POWER CABLE TWECOLUGS** | | | | | | | | | |
| T-1214 | 12 thru 14 | 35 | 13/64" | .186" | 200 | .6 lb. | .08 | .07 | .06 |
| T-810 | 8 thru 10 | 50 | 13/64" | .238" | 200 | 1.2 lb. | .09 | .08 | .07 |
| T-68 | 6 thru 8 | 70 | 21/64" | .289" | 125 | 1.7 lb. | .10 | .09 | .08 |
| T-46 | 4 thru 6 | 90 | 21/64" | .347" | 100 | 2.7 lb. | .13 | .12 | .11 |

Group "F"

# TWECO "LUG-SET" SPLICERS

- MADE FROM PURE COPPER TUBE

Rubber Sleeve

TWECO "Lug-Set" Splicers make it easy and inexpensive to splice broken or worn places in welding cables. Reel ends and short pieces can be quickly spliced into usable lengths. Field repair of broken cables is made easy. "Lug-Set" Splicers are installed with the TWECO "Lug-Set" Block and Punch.

| Splicer No. | Welding Cable Size | I. D. of Tube | Std. Pkg. | Weight Per 100 | CONSUMER QUANTITY PRICE Copper Tube Only Each Less Than 100 | 100-499 | 500-Up | Rubber Sleeves for Splicers Only |
|---|---|---|---|---|---|---|---|---|
| TS-62 | 6 thru 2 | .461" | 100 | 4 lbs. | $0.24 | $0.23 | $0.22 | $0.10 |
| TS-120 | 1 thru 2/0 | .559" | 50 | 7 lbs. | .40 | .38 | .36 | .12 |
| TS-3040 | 3/0 and 4/0 | .660" | 25 | 12 lbs. | .66 | .63 | .60 | .14 |
| TS-40HD | 4/0 Hvy. Duty | .776" | 24 | 17½ lbs. | .96 | .91 | .86 | .16 |

Group "F"

Quantity bracket prices apply only when purchased in standard packages.
"Lug-Set" Splicers and Solder Type TWECOLUGS may be grouped for quantity.

# TWECO "LUG-SET" BLOCK and PUNCH

Top View Ready to Insert

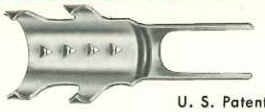
Bottom View Attached

Bottom View of Splicer Attached

TWECO "Lug-Set" consists of an eight-saddle back-up block and a special round-end punch for mechanically attaching Copper TWECOLUGS and "Lug-Set" Splicers. The punch impacts the lug barrel into a "U" shape as shown in the illustrations. Maximum conductivity is assured through the impacted high pressure contact of the lug or splicer with the cable strands. Installed in a fraction of the time required to solder a lug. The saddles of the block fit all sizes of TWECOLUGS and "Lug-Set" Splicers. TWECO "Lug-Set" also attaches TWECO Jacket-Grippers shown in TWECO Bulletin MSA-1965.

| | | Weight | Consumer Price |
|---|---|---|---|
| TWECO No. 12-BP | "Lug-Set" Block & Punch Set | 1½ lbs. | $6.60 |
| TWECO No. 1-B | "Lug-Set" Block only, each | 1 lb. | 4.95 |
| TWECO No. 2-P | "Lug-Set" Punch only, each | ½ lb. | 1.65 |

## TWECO CABLE CONNECTION SUPPORT



U. S. Patent No. 2,911,616

No. 10-P for All TWECO Holders

Strand breakage behind the electrode holder connection has always been the cause for hot holders. The twisting of the holder as a man welds, causes these fine strands of wire to work harden and break.

TWECO Cable Connection Supports stop this breakage, anchoring first in the holder socket and then bridging across the bare strands and securely gripping the cable jacket. Strand breakage is permanently stopped. Fits all TWECOTONG Holders.

| Connection Support No. | Std. Pkg. | CONSUMER QUANTITY PRICES Less than 100 | 100-499 | 500 Up |
|---|---|---|---|---|
| No. 10-P | 50 | $0.25 | $0.23 | $0.21 |

## PRODUCT GROUPING INFORMATION FOR LOWEST COST

It will be noted all through the TWECOLOG, in the margin of the pages, that each type of product is given a Group Letter. Different sizes and types that are listed under the same Group Letter may be combined for the 6-11, 12-47, 48-99, 100-249, and 250-Up quantity bracket price. Intergrouping is not permissible. For example, Electrode Holders in Group "A" cannot be grouped with Cable Connectors in Group "C."

## TWECO MISCELLANEOUS SPECIAL APPLICATION PRODUCTS

TWECO items not shown in this TWECOLOG include: Tapered Screw Type TWECOLUGS, No. T-908 Cable Cutting and Stripping Hand Tool, Replacement Tapered Machine Plugs, TWECO Conversion Adapters, TWECO Jacket Grippers, TWECO Carbon Electrode Holders, TWECO "Screw-Protect," and TWECO Electrical Joint Compound and Lubricant. For full details covering these products, please request TWECO Bulletin MSA-1965.

# WELDING CURRENT LEAKS...

## Let's do something about it!!!

***Most welding shops actually run "knee-deep" in lost current***

**LOST "DEPOSITION MAN HOURS" because of faulty electrode holders, grounds, cable connectors, splicers, lugs, cost the welding industry millions of dollars in net profit every year. Chances are 10 to 1 your shop is sharing this great loss. Hot handed operators cannot and do not provide maximum production or profit.**

**WELDING CABLES ARE NOTHING MORE THAN PIPELINES carrying welding current from the welding machine which acts as a pumping station. The operator regulates the controls for required volume and pressure or amperage and voltage as electrically termed. An efficient, cool-running welding circuit is provided with ample size cables tightly connected throughout. It takes *only one* bad connection on either the ground or electrode cable to make the whole circuit hot-running and inefficient.**

**TWECO HAS AVAILABLE FOR YOU a four-page service bulletin No. CC-66 which tells how to check for and eliminate these welding problems. Write for your free copy.**

**Tweco Products Are Distributed World-Wide Through Leading Welding Supply Distributors**

*DISTRIBUTED BY:*


Tweco PRODUCTS, INC.

MANUFACTURERS: ELECTRODE HOLDERS, GROUND CLAMPS, CONNECTORS, CABLE CONNECTIONS FOR ARC WELDING

P. O. BOX 666 • WICHITA, KANSAS 67201
Factory: Boston at Mosley (316) AMherst 5-1684



TWECOLOG NO. 16

LITHO IN U. S. A.

3-1-1966

Recd 2/23/67

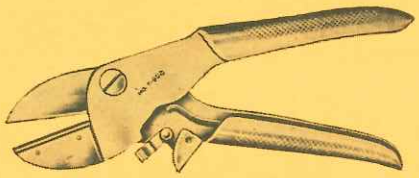
NWSA-390

# Tweco PRODUCTS . . . .

## SPECIAL APPLICATION EQUIPMENT AND MATERIALS

**TWECO has always had the policy, "IF IT GOES ON THE END OF A WELDING CABLE OR PROVIDES EFFICIENCY IN THE USE OF WELDING CABLES, WE ARE INTERESTED IN MAKING IT." The items listed in this bulletin are of major importance to many users of the arc welding process and do meet the long standing TWECO principle. All are good efficiency items that can do a better job and reduce welding costs in many shops.**

## JACKET STRIPPING AND CABLE CUTTING HAND TOOL



NO. T-908 HAND TOOL

The No. T-908 Hand Tool, ESPECIALLY SHARPENED BY TWECO TO CUT WELDING CABLE, is an amazing efficiency item that should be used by everyone who has to maintain welding cables. It cuts from size 4 through 4/0 welding cable, either copper or aluminum. Makes the cut in 1 or 2 seconds if the tool is kept sharp.

The Hand Tool also does an excellent job of jacket stripping preparatory to making a cable connection. The T-908 eliminates the use of a pocket-knife, hacksaw, hatchet or heavy cutter for cutting and stripping of welding cable.

The T-908 has Super Leverage for cutting. The "razor sharp" cutter blade is backed up by a replaceable bronze anvil which prevents dulling the blade. Tool is easily sharpened with a file. Get a good square cut on the end of the cable every time. A good connection starts with a square-cut cable. The T-908 also cuts with no effort both single and twin-weld oxy-acetylene welding hose. Welding maintenance men cannot afford to be without this tool. Comes individually packaged with instructions for using and sharpening. Plated . . . 15 oz. PRICE . . . $5.50

Replacement Anvil ..... $ .40

## REPLACEMENT MACHINE PLUGS—Ball-Point Type

These Replacement Plug-In Male Ends fit Miller made AC welding machines that use the long tapered plug and receptacle for connecting electrode and ground lead cables to the machine. These plugs will also fit many models of P & H, Airco, NCG and other makes of machines. This brass plug has the same taper as the original plug furnished on all Miller Made Machines.

Available in two sizes to accommodate both large and small welding cable sizes. Furnished with TWECO's Mechanical Ball-Point Connection for attaching the welding cable. Can be used with either copper or aluminum welding cable. Plug-In is equipped with a heavy wall fibre cover for easy, safe handgrip.

MILLER TAPER TYPE PLUG-IN

COVER REMOVED

SPECIFICATIONS AND PRICES

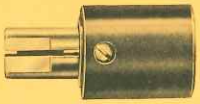
| Plug No. | Taper Length | Taper Dimension | Cable Capacity | Type Connection | Weight | Price |
|---|---|---|---|---|---|---|
| 1-MT | 1-3/4" | 21/64 to 23/64" | 4, 2, 1 | Ball-Point | 4½ oz. | $4.00 |
| 2-MT | 1-3/4" | 21/64 to 23/64" | 1/0, 2/0, 3/0 | Ball-Point | 7 oz. | 4.40 |

## RECEPTACLE CONVERSION ADAPTERS

To make possible the use of TWECO Sol-Con, Mec-Con or Ball-Point Male Plugs on welding machines equipped with receptacles of the cam locking type. This Conversion Adapter may be easily and securely fitted into the machine receptacles, and then any TWECO Male End Plug, within sizes, will plug into the machine.

Available in two sizes to fit small or large cam locking fittings. The small size, No. 1-CLC, fits small cam locking receptacles and takes any No. 1 size TWECO Male Plug. The large size, No. 2-CLC, fits large cam locking receptacles and takes any No. 2 or 4 size TWECO Male Plug.

NO. 1-CLC



No. 2-CLC

SPECIFICATIONS AND PRICES

| Adapter No. | Fits Cam Locking Machine Receptacle | Fits TWECO Male Plug Ends | Weight | Price |
|---|---|---|---|---|
| 1-CLC | Small — 3/8" I. D. | Nos. 1, 1-M, 1-MBP | 2½ oz. | $1.00 |
| 2-CLC | Large — 11/16" I. D. | Nos. 2, 2-M, 4-M, 2-MBP, 4-MBP | 5 oz. | 1.30 |

## TWECO "SCREW-PROTECT" SCREW HEAD PROTECTION

Gives cover protection to slotted screw heads holding electrode holder insulation and cable connector covers in place. Keeps out weld spatter, dirt and corrosion. "SCREW-PROTECT" digs out easily with a screwdriver when changing insulation or covers. The problem of removing screws is eliminated. TWECO "SCREW-PROTECT" is a putty-like asbestos filled material. A pinch of it is worked into a ball between the thumb and forefinger, then pressed firmly over the screw head with the thumb.

| | | |
|---|---|---|
| 1/3 oz. Package | to cover approx. 50 screw heads | $ .25 |
| 8 oz. Package | to cover 1,000 screw heads | 1.25 |
| 16 oz. Package | to cover 2,000 screw heads | 2.00 |

## TWECO ELECTRICAL JOINT COMPOUND AND LUBRICANT

TWECO Electrical Joint Compound and Lubricant reduces resistance in all mechanical cable connections on electrode holders, ground clamps, cable connectors, cable lugs, etc. It is also effective as a lubricant on sliding or moving electrical contacts such as encountered in switches and rotary grounds. It is especially effective on aluminum strands or surfaces. Works with aluminum to aluminum or aluminum to copper.

TWECO Electrical Joint Compound and Lubricant is a heavy grease reinforced with flourides. Its etching effect breaks down surface oxidation on contacting parts so current can pass freely. Comes in a 1 oz. plastic squeeze bottle for easy application. Apply generously to cable strands, sockets or contact area. Electrical resistance can be cut by as much as 40 to 50 percent.

1 oz. Plastic Squeeze Bottle ..... $ .50

# TWECOLUGS — TAPERED SCREW TYPE

- Applied with Wrenches
- Reusable
- Extreme Pressure
- Burnished Contact
- Works Equally Well on Copper or Aluminum Cable

1" Stripped Cable End — "Pressure Tapered" Nut — Tapered Lug Screw

**EASY TO INSTALL**

Insert bare strands into "Pressure-Tapered" nut. Center the Lug Screw point in strands inside nut.

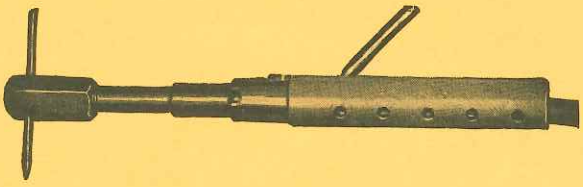
Hold the nut in stationary position in vise or wrench. Turn Lug Screw into nut until securely tight.

### SPECIFICATIONS

| Number | Size of Stud Hole | Cable Capacity | Weight | Std. Pkg. | 1-5 | 6-11 | 12-47 | 48-99 | 100-249 | 250-Up |
|---|---|---|---|---|---|---|---|---|---|---|
| No. 2-H | 17/32" | 4, 2, or 1 | 4 ozs. | 25 | $2.10 | $1.90 | $1.80 | $1.70 | $1.60 | $1.50 |
| No. 0-H | 17/32" | 1/0 or 2/0 | 5 ozs. | 20 | 2.40 | 2.15 | 2.05 | 1.95 | 1.85 | 1.75 |
| No. 40-H | 21/32" | 3/0 or 4/0 | 8 ozs. | 12 | 2.60 | 2.35 | 2.25 | 2.15 | 2.05 | 1.95 |

# TWECO CARBON ELECTRODE HOLDERS

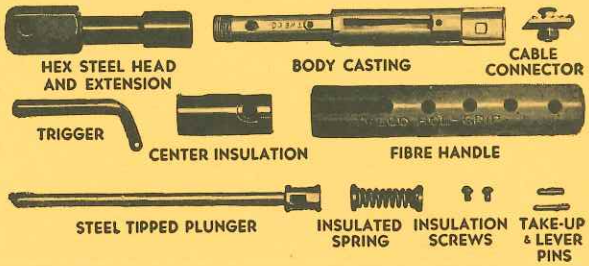
TWECO air-cooled single Carbon Electrode Holders are for use on D.C. welders. They are well balanced and cool running. Firm grip on the carbon without breakage. The holder head, tube and plunger tip are made of steel to prevent burnout. All parts are replaceable. A fine tool for the "old-timers" who haven't forgotten how to use carbon arc welding and cutting.



### SPECIFICATIONS AND PRICES

| Carbon Holder Model | Amperage Capacity | Carbon Electrode Capacity | Type Cable Connection | Weight | Length | Price |
|---|---|---|---|---|---|---|
| No. 150-C | 150 | 1/8" thru 1/4" | Clamp | 13½ oz. | 10¾" | $10.00 |
| No. 200-C | 200 | 3/16" thru 3/8" | Clamp | 20 oz. | 13 " | 12.00 |
| No. 300-C | 300 | 1/4" thru 1/2" | Clamp | 36 oz. | 14¾" | 15.00 |
| No. 500-C | 500 | 7/16" thru 3/4" | Clamp | 55 oz. | 19¾" | 20.00 |

## TWECO CARBON ELECTRODE HOLDER PARTS




## Parts and Prices

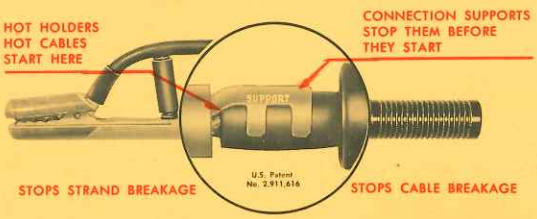
| | No. 150-C | No. 200-C | No. 300-C | No. 500-C |
|---|---|---|---|---|
| 1. Hexagon Steel Head with extension and coupling (furnished as unit only) | $3.50 | $4.05 | $5.50 | $8.20 |
| 2. Holder Main Body Casting | 2.70 | 2.90 | 3.70 | 5.75 |
| 3. Plunger, steel tipped | 1.50 | 2.00 | 2.75 | 3.50 |
| 4. Spring with insulators | .50 | .60 | .65 | .65 |
| 5. Trigger, fibre tube covered, with pin | .55 | .70 | .75 | .95 |
| 6. Center insulation with screw | 1.00 | 1.20 | 1.30 | 2.60 |
| 7. Fibre handle with screw | 1.00 | 1.15 | 1.20 | 1.35 |
| 8. Cable Clamp, bolt and nut | .20 | .25 | .25 | .25 |
| 9. Extra screws for handle or insulation, dozen | .10 | .10 | .15 | .15 |
| 10. Stainless pin for lever | .05 | .05 | .05 | .05 |
| 11. Stainless pin for Spring Take-Up | .05 | .05 | .05 | .05 |

# TWECO CONNECTION SUPPORTS

The TWECO Welding Cable Connection Support is a formed steel clamp, which anchors in the electrode holder connection socket and then extends back to encircle and grip the rubber jacket of the cable behind the bare strands. Prevents strand breakage.

| Connection Support No. | Cable Capacity | Type Holder Support Fits | Std. Pkg. | Less Than 100 | 100-499 | 500 Up |
|---|---|---|---|---|---|---|
| No. 10-P | 1 thru 4/0 | All TWECO Holders | 50 | $0.25 | $0.23 | $0.21 |

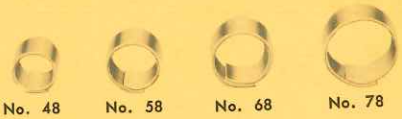
No. 10-P




# TWECO JACKET GRIPPERS

The TWECO "JACKET-GRIPPER" is a lapped end steel band which is applied around the jacket of a welding cable with TWECO "Lug-Set" Equipment. It prevents the cable jacket from slipping at the point. Used behind connectors, lugs, ground clamps.

| Jacket Gripper No. | Welding Cable-Size | I. D. of Gripper | Std. Pkg. | Weight Per 100 | Less Than 100 | 100-499 | 500 Up |
|---|---|---|---|---|---|---|---|
| No. 48 | 4 and 2 | ½" | 100 | 25 ozs. | $0.10 | $0.09 | $0.08 |
| No. 58 | 1 and 1/0 | ⅝" | 100 | 32 ozs. | .12 | .11 | .09 |
| No. 68 | 1/0 and 2/0 | ¾" | 50 | 36 ozs. | .14 | .13 | .12 |
| No. 78 | 3/0 and4/0 | ⅞" | 50 | 42 ozs. | .16 | .15 | .14 |



No. 48 No. 58 No. 68 No. 78

**For more detailed information and Parts Price List on TWECO PRODUCTS including items not shown in this catalog page, request a copy of the current TWECOLOG.**

Tweco PRODUCTS, INC.
MANUFACTURERS: ELECTRODE HOLDERS, GROUND CLAMPS, CONNECTORS, CABLE CONNECTIONS FOR ARC WELDING
P. O. BOX 666 • WICHITA, KANSAS • 67201
Factory: Boston at Mosley Tel. Area Code 316 AMherst 5-1684

DISTRIBUTED BY

Form MSA-1965 3-1-1965

Printed in U. S. A.